SHOUT
SHARE
IT

THE

BOTANICAL EXCHANGE CLUB

OF THE BRITISH ISLES.

REPORT FOR 1882.

Manchester:
PRINTED BY JAMES COLLINS & CO., KING STREET.
1884.

THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

REPORT OF THE DISTRIBUTOR FOR 1882.

By W. H. BEEBY.

The delay which has occurred in the publication of the Report for 1882 is much regretted, but it has been caused by the late period at which some of the criticisms were received. Dr. Boswell's notes only came to hand in February, when the Report had just been completed, but his valuable criticisms have been added thereto. Members of the Club will regret to learn that this delay on Dr. Boswell's part has been caused by illness. The thanks of the members are due to Professor Babington and Mr. Baker for examining *Rubi*, roses, and other plants; to Dr. Boswell for notes on various species; to the Rev. J. E. Leefe for his report on the Willows; and to Mr. Arthur Bennett, Mr. Archer Briggs, and Messrs. H. and J. Groves for the same on the Potamogetons, Roses, *Characeæ*, &c.

Most of the New County Records have long since been published, and therefore appear merely as confirmations. A recapitulation of these will be found at the end of the Report. Some plants sent as New County Records have been published so long ago as the first edition of "Top. Botany," and possibly I may have omitted some new records not sent as such by the contributors.

The total number of plants received for distribution was about 3440, from 35 contributors.

	Counted as Specimens.
Mr. James E. Bagnall	46
Mr. Charles Bailey, F.L.S.	292
Dr. R. L. Baker	283
Mr. W. H. Beeby	156
Mr. Alfred W. Bennett, B.Sc., F.L.S., &c.	143
Mr. Arthur Bennett, F.L.S.	203
Dr. John T. Boswell, F.L.S., &c.	82
Mr. T. R. Archer Briggs, F.L.S.	10
Mr. Henry Bromwich	267
Mr. Andrew Brotherston	28
Rev. Canon T. Butler	24
Dr. Eyre de Crespigny	162
Mr. G. C. Druce, F.L.S.	190
Mr. T. B. Flower, F.L.S.	32
Mr. W. Irvine Fortescue	57
Rev. H. E. Fox, M.A.	49
Dr. John Fraser, M.A.	66
Mr. John E. Griffith, F.R.A.S.	10
Mr. James Groves	141
Dr. F. Arnold Lees	26
Rev. Augustin Ley, M.A.	474
Rev. E. F. Linton, M.A.	90
Mrs. E. A. Lomax	75
Mr. F. T. Mott, F.R.G.S.	19
Mr. George Nicholson	117
Rev. W. H. Painter	39
Rev. W. H. Purchas	27
Mr. S. A. Stewart	46
Mr. J. E. Sunderland	15
Mr. E. G. Varenne, M.R.C.S., &c.	37
Mr. W. B. Waterfall	30
Mr. George Webster	59
Mr. J. W. White	90
Rev. Robert Wood (the late)	10
	3395

Members will kindly correct such labels as may require it, by the Report.

W. H. Beeby.

NOTES ON THE PLANTS GATHERED IN 1882.

Thalictrum ? Cheddar Cliffs, Somerset, June, 1882. I should call this *montanum*, but there seems to be some record of *saxatile* from this place.—G. C. DRUCE. I call this *minor*, b.—C. C. Babington. *T. minus, montanum.*—J. T. Boswell.

Ranunculus peltatus, Fries., near *elongatus*, Hiern. Margin of Mill dam, R. Amber, Ashover, N. E. Derby, 3rd June, 1882.—CHARLES BAILEY. One of Prof. Babington's forms of *R. peltatus*, similar in fact to a plant I sent him which he calls form 1; I think, however, that the majority of our *Batrachium* students would place it with *floribundus.*—J. E. Bagnall (*in litt.* to C. Bailey). Is *R. peltatus* approaching *floribundus.*—J. T. Boswell.

R. Baudotii, var. *confusus ?* Ditch, Copthorne Common, E. Sussex.—W. H. BEEBY. I do not now think this referable to *confusus.*—W. H. B. Mr. W. P. Hiern remarks on the two above-named plants, "not sufficiently matured for fullest determination."

R. flabellatus, Desf. var. *europæus.* Fide Nyman et Uechtritz, *in litt.*, Hort. Croydon. Plant from St. Aubin's Bay, Jersey.—A. BENNETT. The plant formerly named *chærophyllus*, L.

R. parviflorus, L. Fotheringay, Northampton, May, 1877.—G. C. DRUCE.

R. Ficaria, L., var. College Gardens, Oxford, May, 1882.—G. C. DRUCE. Merely the form which *R. Ficaria* assumes late in the season.—J. T. Boswell.

Fumaria confusa, Jord. Whitney, Herefordshire, 31st August, 1882, and St. Weonard's, Herefordshire, 11th July, 1882.—A. LEY. Mr. Ley writes that this plant has been variously named *Boræi, muralis*, and *confusa.* Mr. J. G. Baker confirms me in naming it *confusa.* "Of course, nothing to do with *Boræi.* I call it *confusa*, as he does. The fruit seems to have a very broad neck, quite different from that of *muralis.*"—C. C. Babington. Rightly named *confusa.*—J. T. Boswell.

F. muralis, Sonder. Chalk Downs, Lowberry Hill, Berks, Sept., 1882.—G. C. DRUCE. Is rightly named.—J. T. Boswell.

F. officinalis, L. Gomshall, Surrey, 21st May, 1882.—W. H. BEEBY. With bracts exceeding fruit-stalks.

F. parviflora, Lam. Chalk Downs, Lowberry Hill, Berks, Sept., 1882.—G. C. DRUCE.

Brassica Briggsii, Wats. From various localities in Devon and Cornwall.—E. G. VARENNE.

Cardamine pratensis, var. *C. Hayneana*, Welw. Root from Mortlake; cult. at Kew, 1882.—GEO. NICHOLSON. Ditch, near Horley, Surrey, 30th April, 1882.—W. H. BEEBY. On the latter Mr. G. Nicholson writes: "I do not see why it should not be called *Hayneana.*" "Probably correct."—C. C. Babington. This plant is now extinct in Mr. Nicholson's original station.

Arabis stricta, Huds. (fruit). St. Vincent's Rocks, West Gloster, May, 1882.—W. B. WATERFALL.

Draba verna, L. var. ? Sparsey Bridge, Oxon, April, 1882.

"When fresh the fruit section is almost as round as *inflata*."—G. C. DRUCE. I queried this being var. *brachycarpa*, to which Mr. J. G. Baker replies "Yes." Very like the plate of *brachycarpa*, Jord., but surely these forms are not worthy of distinction.—C. C. Babington. Is *præcox*, Reich. (as I suppose I must call *brachycarpa*, E. B. III.), as *D. brachycarpa* is a North American plant quite different from the European.—J. T. Boswell.

Subularia aquatica, L. Westmoreland, August, 1882.—G. C. DRUCE.

Capsella Bursa-pastoris, Mœnch. var. *rubella?* Near Farnham, Surrey, May, 1882.—W. H. BEEBY. Quite doubtful for *rubella*, Reuter.—J. G. Baker

C. Bursa-pastoris, Mœnch, var. *gracilis*. Stack-yard, Old Ingarsby, Leicestershire, April, 1882. "In April the stack-yard was empty and completely overgrown with this peculiar form of *Capsella*. In September alterations had been made, and not a vestige of the plant was to be found."—F. T. MOTT. This is 1901 of the Société Dauphinoise, and said on the ticket to be *C. gracilis*, Grenier. It is a form with abortive silicles.—J. G Baker.

The plant from Cound, Salop, July, 1882, T. BUTLER, is a large form of the type.

Lepidium Smithii, Hook., var. *alatostyla*, Townsend. "This form, which was described by Mr. Townsend in the Hants Flora (1883), was first noticed by me several years ago, growing in some plenty, along a bank on the coast, near Redbridge, Hants, but I have not met with it elsewhere. The present specimens were collected in the same locality by my sister, Miss M. Groves, in May and June, 1882. The usual notch at the apex of the pouch is entirely wanting in this form."—J. GROVES. "*L. Smithii* without a notch is very interesting."—C. C. Babington. "A very remarkable plant, probably deserving to be considered a sub-species if it comes true from seed. The entire pods are considerably more swollen below than in *L. Smithii*, the fruit pedunches are shorter, and the rachis has longer hairs. The name is an unfortunate one. If a nominative specific name with a capital letter, it ought to be *Alatistylus;* if an adjective, *alatistylatum*."—J. T. Boswell.

Neslia paniculata, Moulsey, 1882.—E. DE CRESPIGNY. "Is *Bunias orientalis*."—J. T. Boswell.

Viola lactea, Sm., and var. *intermedia?* Near Copthorne, Surrey. May, 1883.—W. H. BEEBY. "The first is correctly named, and the other from the same station, growing in longer herbage, I believe to be Mr. Watson's V. *lactea*, b. *intermedia*."—J. T. Boswell.

V. stagnina, Kit. Wicken Fen, Cambs., 30th May, 1882.—J. GROVES.

V. Mackaii. Sinclair Bay, Wick, Caithness, 17th June, 1882.—W. H. PAINTER (Coll., J. Grant). "Scarcely differs from ordinary *tricolor*."—J. G. Baker. Is *eu-tricolor*.—J. T. Boswell.

V. tricolor, L. var. *Paillouxii*. Near Cleckheaton, Oxon, June, 1882.—G. C. DRUCE. "Exactly *V. mentita*, Jordan (Bill. exsicc. 2021), except that the petals are a little longer. We seem to have all imaginable forms here except *Paillouxii*, which I cannot find."—J. Britten.

Viola tricolor, var.? Cornfield, Myton, Warwick, June, 1882.—H. Bromwich. Mr. Britten likewise refers this to *V. mentita*, but does not clearly see how that plant is to be separated from *segetalis*, Jord. Mr. Baker remarks—'Of Jordan's species I expect *mentita*, *agrestis*, and *segetalis* would go into our English *arvensis*. I grew *mentita* long ago at Thirsk from seed given to me by Déséglise.' Is *V. arvensis*."—J. T. Boswell.

Polygala vulgaris, L. (approaching var. *grandiflora*, Bab.) Chalk cliffs, near Dover, E. Kent, June, 1882.—Arthur Bennett. "Is indeed very like my plant from Ben Bulben. I have, however, doubts. It deserves more attention."—C. C. Babington.

P. oxyptera var. *pseudo-uliginosa*. Cronkley Fell, Yorks., July, 1882. "Professor Lawson named it *uliginosa*."—G. C. Druce. "Is typical *P. depressa*."—J. T. Boswell.

Sagina nodosa, Mey. var. *glandulosa*, Bess. Towing path, near Kew, Surrey, 1882.—E. de Crespigny. Weston-super-Mare, N. Somerset, June, 1882.

Stellaria umbrosa, Opitz. Between Wotton Hatch and Gomshall, Surrey, May, 1882.—W. H. Beeby. "Is rightly named. Certainly a sub-species, as it is truly perennial and produces barren shoots in autumn."—J. T. Boswell.

Geranium Robertianum? Dungarvan, co. Waterford, June, 1882.—J. Britten and G. Nicholson. "Is var. *modestum*."—J. T. Boswell.

G. Robertianum. Shore, Instow Burrows, North Devon, Sept., 1882.—A. Ley. "Is var. *purpureum*."—J. T. Boswell.

**Tilia argentea*, Desf. Portinscale, Derwentwater, Cumberland, 20th September, 1882.—Charles Bailey.

Ononis arvensis, L. var. *maritima*, Bab. Sandhills, south of Eden estuary, near St. Andrews, N.E. Fife, 5th August, 1882.—Charles Bailey. "This is a form of *arvensis*, and not *maritima*, Dumortier, which is *O. repens*, L. (fide Professor Lange).—A. Bennett. *O. arvensis*, L. var. *O. maritima*, Dum. (*O. repens*, var. *horrida*, Lange.) North Denes, Great Yarmouth, E. Norfolk, August, 1881.—Arthur Bennett. And, *O. arvensis*, var. *repens*. St. Michael's Bay, Cornwall, August, 1882.—E. G. Varenne.

Ononis arvensis, L., var. *repens*, L. Cat. *O. maritima?* Dum. Sand Dunes, near Yarmouth, E. Norfolk. "Since my 'Notes on Norfolk Plants' (J. of Bot., 1881, p. 358) appeared, I have ascertained that this plant is the *O. maritima*, Dum., as I thought, and that by sending specimens to Prof. Lange, of Copenhagen, labelled '*O. repens*, L., var. *horrida*, Lange?' (a name from Willkomm and Lange's Prod. Fl. Hisp.) In his answer, he writes, 'It is exactly what I do mean by var. *horrida*,' and he very kindly sent me a paper on this plant, entitled 'On the synonymy of several species of the Flora of Denmark and the neighbouring countries,' by Prof. Lange. This is in Danish, but a French abstract is also given. It is too long to quote in detail, but I may mention that he calls the plant

O. repens, L.
(*a*), *inermis*, Lange.
(*b*), *horrida*, Lange.

a, occurs in Spain, France W., Belgium, the Friesian Islands, and

England (Mona—Isle of Man ? or, it may be the Welsh Island ?) Dill, Cornwall, Plukenet's locality not indicated, Woolwich, Gravesend, Deal, Yarmouth (Ray). *b*, W. France (Lloyd), Sables d'Olonne (Vendée J. Letourneau), and now may be added Spain. Prod. Fl. Hisp., vol. iii., p. 394. England—Norfolk ! Suffolk ! The specimens sent from Cornwall by Mr. Varenne as *O. arvensis* b. *repens* probably belong to var. *a*, but there is no ripe fruit, so that it is a little uncertain. As to the name *O. repens*, L., for a full and detailed account I would refer to Prof. Lange's paper, entitled 'Bidrag til Synonymiken for nogle kritiske Arter fra Danmarks og Nabolandenes Floraer, af Joh. Lange, Kjobenhavn, 1873,' pp. 25-42. One extract only I should like to give : 'M. Wallroth, qui a fourni de précieux matériaux sur les espèces de ce groupe, et qui a mis en doute l'identité de l'*O. repens* et de l'*O. procurrens*, a déjà adressé une invitation à ses collègues d'Angleterre, pour les engager à rechercher si la plante qui croît sur les côtes anglaises doit être réunie à l'*O. procurrens*, ou en être séparée comme une espèce distincte ; *mais cette invitation est restée jusqu'à présent sans résultat.*' This is to be regretted, written as this was in 1873. Will British botanists *now* search out these forms and help Professor Lange ?—Arthur Bennett. On subsequently sending Mr. Bennett ripe fruit of Mr. Varenne's plant, he writes, 'I now think it *O. repens;* it will belong to *a. inermis*, Lange, Prod. Flor, Hisp., spinis omnino carens,' while my Norfolk specimens belong to '*b. horrida*, Lange, Prod. Flor. Hisp., spinis sat crebris ½—1 pollicaribus, horizontaliter divergentibus arcuata.'"

Lotus tenuis, Kit. Harrogate, Yorks, 4th August, 1882.—E. F. Linton. Forde Bog, Newton Abbot, Devon, 21st August, 1882.—W. H. Painter.

Lathyrus pratensis, L. Aviemuir, East Inverness (v.c. 96).—J. Groves.

Poterium muricatum, Spach. Lea Mills, Gloucestershire.—J. W. White. Is var. *stenolophum*.—J. T. Boswell.

* *Spiræa tomentosa*, L. In plenty, with every appearance of wildness, among *Prunus spinosa*, &c., bordering east side, south end of Laughton "Low Warren," N. Lincolnshire, July, 1882.—F. A. Lees.

* *S. hypericifolia*, L., var. *Plukenetiana*, D.C. Shores of Ulleswater Lake, Cumberland.—The late Rev. R. Wood (Coll. W. Hodgson).

Rubus ramosus, Bloxam. Between Longnor and Alstonfield, N. Staffordshire, 10th August, 1882.—W. H. Purchas. Doubtless named by Bloxam.—C. C. Babington.

R. discolor, W. and N. var. *leucocarpus*. Hedge at the foot of the Mendips, near Axbridge, Somerset, 24th Sept., 1882. See "J. of Bot." XI., 346.—J. W. White. Quite an ordinary form of *R. discolor*, W. and N., except in having light-coloured fruit.—T. R. Archer Briggs.

R. Colemanni, Blox. Quarry banks, Hart's hill, Warwickshire. This was sent to Professor Babington in 1880, labelled *R. Colemanni*. Commenting on it he says : "I believe to be *R. Colemanni*, of Bloxam." This plant is very abundant in the above-mentioned station, growing in company with *R. leucostachys*, but has a strikingly different appearance both in habit of growth and colour of flowers.—James E. Bagnall. There must be an error here, as these specimens

are those of *R. leucostachys*, Sm., almost typical ones.—T. R. Archer Briggs.

Rubus villicaulis, W. and N. Strawberry Hill, Clevedon, Somerset, 28th Sept., 1882.—J. W. White. Such a *portion* of panicle is not suitable for distribution. Approaches *R. leucostachys*, Sm., and I think might be so named by some. The respective limits of these species were viewed differently by the late Rev. A. Bloxam and Professor Babington.—T. R. Archer Briggs. An untypical form of *carpinifolius*.—C. C. Babington.

R. macrophyllus, Weihe, b. *macrophyllus*. Bishop's Wood, Highgate, Middlesex, 1882.—E. de Crespigny. "Yes."—C. C. Babington.

R. mucronulatus, Blox. Kingcausie, Kincardineshire, Sept., 1882. J. T. Boswell.

R. Sprengelii, Weihe. Cannock Chase, Staffordshire, July, 1882. J. Fraser. "Yes."—C. C. Babington. This seems to be satisfactory for *Sprengelii*.—T. R. Archer Briggs.

R. Sprengelii, Weihe, b. *Sprengelii*. Hampstead Heath, Middlesex, 1882.—E. de Crespigny. Specimens weak for determination, but I think correct.—T. R. Archer Briggs. Very nearly *Borreri*.—C. C. Babington.

R. Kœhleri, Weihe, var. *pallidus*. Yate Common, Gloucestershire, 26th Sept., 1882.—J. W. White. The pieces seem different species; such a specimen as the panicle is useless.—T. R. Archer Briggs. Too bad to name; not *Kœhleri*.—C. C. Babington.

R. Kœhleri, Weihe. Hedge at Hare Cop Farm, near Alstonfield, N. Staffordshire, 1882.—W. H. Purchas. "*Pallidus*."—C. C. Babington.

R. Kœheleri, var. *infestus*. Castlereagh Hill, Belfast, 26th July, 1882.—S. A. Stewart. Apparently *humifusus*.—C. C. Babington.

R. mutabilis, Genev. Harrow Weald Common, Middlesex, 1882. See Reports Bot. Rec. Club, 1880, and Bot. Ex. Club, 1879.—E. de Crespigny. Almost certainly *R. Guntheri*, Angl. = *R. saltuum*, Focke.—T. R. Archer Briggs.

R. humifusus, Weihe. Harrow Weald Common, Middlesex, 1882. See Report Bot. Rec. Club, 1880, p. 134.—E. de Crespigny. I am unacquainted with *R. humifusus*; had it not been so labelled, I might have suspected it to be a form of *R. Guntheri*, Angl. = *R. saltuum*, Focke.—T. R. Archer Briggs. "*Hystrix*."—Prof. Babington.

R. Reuteri, Merc. Sellack, Herefordshire, 24th August, 1882. I venture to transgress the second regulation of the club in sending a few specimens of this, with a view partly of obtaining some expressions of opinion upon it. It is a conspicuous member of the glandulose section of *Rubus* in the Ross neighbourhood, in which it is very abundant, standing clearly apart as well from ordinary *glandulosus*, Bell., as from *diversifolius*, Lindl., and *Kœhleri*, Weihe; and, as far as I am a judge, from familiarity with it in a growing state, certainly meriting a separate name. The specimens I send belong, I believe, to the same form as that to which Prof. Babington gave the name of *R. Reuteri* first, though they are not from the same bush.—Augustin Ley. "Yes."—C. C. Babington.

"*R. cæsius*, var. *tenuis*," or "a glabrous state of *corylifolius*." Prof. Babington. Near the Westside, Alstonfield, N. Staffordshire,

October, 1882.—W. H. PURCHAS. Panicles too advanced and imperfect for certain naming. The sepals seem to clasp the fruit, but the barren stem does not do well for *cæsius*. Somewhat like weak *R. Balfourianus*; certainly one of the *Cæsii*.—T. R. Archer Briggs.

Rubus cæsius, L. var. *tenuis*. Dinmore Hill, Herefordshire, 30th August, 1882.—A. LEY. "Yes."—C. C. Babington. *R. cæsius* certainly, and I think probably right as to the variety.—T. R. Archer Briggs.

Upon those roses marked "J. G. B.," Mr. Baker remarks: "I cannot mend the names of these roses."

Rosa Donniana, Woods, var. ——. Brafferton, N. Yorks., July, 1882.—G. WEBSTER. J. G. B.!

R. involuta, var. ——, *R. sabauda*, Rapin? Falcon Clints, Teesdale, Co. Durham, July, 1882.—G. WEBSTER. J. G. B.!

R. Robertsoni, Baker. Hedgerow, near Thirsk, Yorks., August, 1881—G. NICHOLSON. J. G. B.!

R. tomentosa, var. *subglobosa*. Ackworth, Yorks., 17th Sept., 1874.—W. R. LINTON. J. G. B.!

R. rubiginosa, var. *comosa*, Ripart? Sprowston, Norfolk, 13th Sept., 1882.—E. F. LINTON. J. G. B.!

R. micrantha, Sm., var. *Briggsii*. St. Thomas' Head, Somerset. New locality; authenticated by Mr. Briggs, 28th August, 1882.—J. W. WHITE. Mr. G. Nicholson and Mr. A. Bennett both call this *sepium*. Mr. Baker writes: "Most likely a *sepium* variety." Mr. Archer Briggs confirms his previous opinion, and writes: "I think Mr. White's *Rosa micrantha*, var. *Briggsii* essentially the same as the plant of the neighbourhood of Plymouth." Perhaps Mr. White will send the plant in an earlier state, so that the sepals may be seen. The styles are quite glabrous in the present (fruiting) specimens, and the leaves are hairy beneath.

R. sphærica, Gren. Easingwold, N. Yorks., October, 1882.—G. WEBSTER. J. G. B.!

R. canina, like *urbica*, but sepals show tendency to ascend, in which case it would be *implexa*. Harrogate, Yorks., 4th August, 1882.—E. F. LINTON. Alleged peculiarity seems too indistinct to be of any account.—T. R. Archer Briggs. J. G. B.!

R. canina, var. *frondosa*. Sprowston, Norfolk, E. I send two (if not three) forms of *Rosa frondosa*. One (dated 9, Sep. 1882) seems to be *frondosa* on the side of *R. urbica*, from which the short round fruit and rounded leaves distinguish it. The other (dated 22, Sep. 1882) has still smaller globose fruit, of the size of *R. arvensis* fruit, but leaves rather long and acuminate, and slightly hairy above, a fact which led me to connect it with *R. tomentella*; but Mr. Baker, on seeing it, said that it was nearer *R. frondosa*. This latter grew in two hedges on land formerly a sandy or gravelly heath.—E. F. LINTON.

R. c., var. *frondosa* (but in the direction of *urbica*). Sprowston, E. Norfolk, 9th Sept., 1882.—E. F. LINTON. Leaves with minute *secondary* gland-tipped serratures.—T. R. Archer Briggs. J. G. B.!

R. c., var. *frondosa*. Horsford, E. Norfolk, 28th August, 1882.—E. F. LINTON. J. G. B.!

R. frondosa, Stev. Great Crostlewaite, near Keswick, Cumberland, 16th Sept., 1882.—CHARLES BAILEY. Leaves distinctly

biserrate and gland-tipped, so that it cannot be *frondosa*, as interpreted by Baker.—T. R. Archer Briggs.

Rosa frondosa. Cop grove, W. Yorks, October, 1882.—G. Webster. J. G. B !

R. c., var. *arvatica*, but inclined to *subcristata.* Goosnargh, Lancashire, 19th Sept., 1874.—E. F. Linton. J. G. B !

R. c., var. *decipiens*, Drun. Micklefield, M. W. Yorks, July, 1882. G. Webster. J. G. B. !

R. c., var. *implexa ?* Goosnargh, Lancashire, 10th Sept., 1874.—E. F. Linton. J. G. B. !

R. Watsoni, Baker. Pately Bridge, W. Yorks., Sept., 1882.—C. Webster. J. G. B. !

R. bibracteata. Chesterton Wood, Warwickshire, July, 1882.—H. Bromwich. I consider *R. arvensis* var. *bibracteata*, Bast. Specimens poor for distribution.—T. R. Archer Briggs. J. G. B. !

The following five un-named Roses were received from Mr. Geo. Nicholson :—

Rosa No. 2, Wimbledon, Surrey, 4th Sept., 1881.
" " 8, Kew, Surrey, 29th June and 7th Sept., 1881.
" " 205, Wimbledon, Surrey, 12th August, 1882.
" " 221, Wraysbury, Bucks., July, 1882.
" " 248, " " Sept., 1882.

No. 2, of which I have only been able to find a single bush, agrees fairly well with 221 and 248. Nos. 221 and 248 in some plenty along a hedge near Wraysbury.—G. Nicholson. I look upon these three as a form of *micrantha.*—J. G. Baker. Mr. Archer Briggs remarks on No. 2 : " The peculiar armature of very minute aciculi and setæ on the smaller branches is very curious."

Satis curiosa. Non ad *inodoram* Friesii pertinet, quia glandulis subfoliaribus omnino expers. Potius *Rosæ tomentellæ*, Lém., formis adnumeranda, imprimis *R. tomentellæ* f. *affinis*, Raŭ, sed pedunculis hispidis, foliolis subcuneatis et aciculis ramulorum egregie differt. Si placet, noram formam *tomentellæ* sistamus, cujus nomen tuo arbitrio commendo.—Dr. Christ, in litt., Nov. 16, 1879.

Le Rosier de Wimbledon que vous avez soumis à mon examen, est vraiment curieux et il mérite d'être étudié avec beaucoup de soin. Comme vous le dites, il se rapproche du *R. inodora*, mais il en diffère, aussi que vous l'avez reconnue, par ses pédicelles chargés de soies glanduleuses et par la presence sur les ramuscules florifères de fines soies glanduleuses.—Francois Crépin, in litt., 28th Dec., 1879.

J'ai reexaminé le No. 2 de Wimbledon, et j'en ai conféré aussi avec mon ami Crépin. Il m'ecrit : " Apres un nouvel examen je trouve que vous pourriez fort bien avoir raison (c'est a dire que la plante este plutôt une *Tomentelle* qu' une *Sepiacée*) j'ai tout lieu de penser que les glandes des feuilles ne sont pas odorantes comme celles des *Rubigineuses.*"

Ma propre opinion, c'est qu'il y a la une plante tenant à peu près le milieu entre les *Tomentelles* et les *Sepium.* C'est une de ces formes faiblement caractérisées comme l'Angleterre produit souvent, avec son climat humide et son ciel voilé (peu d'insolation). Plus on va vers l'orient, plus les formes des Rosiers sont accentuées.—Dr. Christ, in litt., 1880.

No. 8 —This rose occurs along the edges of the shrubberies in the Queen's Cottage grounds at Kew, in company with many forms of *R. canina*. All these, with the exception of my No. 8, I have found on the neighbouring commons, &c. At present it is impossible to say whether No. 8 is really a truly wild plant or not.—Geo. Nicholson. This is close upon what I understand as the true *R. collina*, Jacq.—J. G. Baker. Dr. A. P. Winslow, a Swedish authority on *Rosa*, also looks upon this as good *R. collina*, Jacq.—G. Nicholson.

Mirabilis forma, *albæ*, L., proxima sed alba aciculis in ramulis et ramis fructuque clavato differt. Hybridam suspicatus sum sed quorum parentum? (*alba*, L., verosimiliter hybrida antiqua, multis generationibus formata *gallicæ* et *coriifoliæ* mihi videtur). Ulterius indaganda, floresque collegendi.—Dr. Christ, in litt., Nov. 16th, 1879.

Comme le dit fort bien M. Christ dans son observation que vous m'avez transcrite, c'est une forme très-remarquable. Je suis, comme ce savant, porté a considerer cette forme comme une hybride. Selon moi elle appartiendrait au groupe d'hybrides de *R. gallica* × *R. canina*. Le parfait developpement de ses fruits n'a rien qui doit nous surprendre, attendu que les hybrides sont parfaitement fécondés par les formes legitimes au milieu desquelles elles croissent. Dans mon 7^me^ fascicule je reparlerai de cette forme quand je traiterai des hybrides du *R. gallica* × *R. canina*.—F. Crépin, in litt., June, 1882.

No. 205. Wimbledon. G. Nicholson. "C'est un de ces rosiers anglais qui tiennent du *tomentella* et en même temps du *sepium*, et qui ont été decrits par moi comme le *Rosa sclerophylla*, Scheutz."—Dr. Christ, in litt. I have type specimens of *R. sclerophylla*, and it is evident that in Dr. Christ's eyes *R. sclerophylla* represents a group of grandular *caninæ*.—Geo. Nicholson. Comes very near the naked-peduncled var. of *R. micrantha*, but is less hairy and less glandular on the leaf surfaces.—T. R. Archer Briggs.

R. Lucandiana, Des. et Gal. (teste Déséglise). Askern, S. W. Yorks.—Geo. Webster.

Rosa Andegavensis, Bast. Hedge near Port Wrinkle, Sheviock, E. Cornwall. New I believe to Cornwall. It is not quite typical *R. Andegavensis* since there are a few hairs on some of the midribs and veins of the leaves beneath.—T. R. Archer Briggs.

Cotoneaster vulgaris, Lindl. Great Orme's Head. April, 1879. —J. E. Griffith.

Pyrus latifolia, Syme. New South Molton Road, N. Devon, 19th September, 1882. Probably not native in this station—an old hedge in which a lilac-bush was growing at a short distance.—A. Ley.

P. scandica, Syme? Great Doward, Herefordshire, 2nd June, 1882. Two small trees in rocky limestone woods; unquestionably native. This agrees exactly with a form found in Piercefield Park, Monmouthshire, and which was named for me "*latifolia*" by Mr. J. G. Baker. It appears to me to come nearer "*scandica*."—A. Ley. I queried this as *latifolia* or *Aria*, and Mr. Archer Briggs replies: "Certainly not *latifolia*, which I know well. I believe it ought to go under *Aria* or *rupicola*. Whatever may be the case with regard to *latifolia* and *scandica*, I am led by my experience to think that Boswell's *eu-Aria* and *rupicola* are so connected by intermediates

that for certain plants it is impossible to choose between the two names." This is certainly a puzzling plant. I agree with the Rev. A. Ley in thinking that it cannot be referred to *P. sciandica*, and still less to *P. Mougeotii*, which name has, I believe, been given to it. The incisions between the lobes are deepest beyond the middle of the leaf, which is not the case in the three species already named, but I hesitate whether to call it *P. eu-Aria* or *P. rupicola*. The former has leaves quite as deeply lobed, but the number of veins, from 7 to 10 on each side, indicates its affinity with *P. rupicola*, if the latter be considered deserving of a name. Year by year I incline more to the belief that *P. rupicola* is *P. eu-Aria* growing in uncongenial conditions—poor soil, exposure to wind, or deficient heat.—J. T. Boswell.

Pyrus communis, var. *Pyraster*. Hatton, May, 1882.—R. L. Baker. Probably, but fruit is needed.—T. R. Archer Briggs.

Epilobium montanum, L. var. Garden at Alstonfield, N. Staffordshire. These seedlings closely resemble the parent plant, which originated in my garden—no other species being found there. After cultivating it Mr. H. C. Watson wrote me that, notwithstanding the first-sight likeness to *E. lanceolatum*, he could only consider it (as I had done) a var. of *E. montanum*, and that Mr. J. G. Baker concurred.—W. H. Purchas.

Isnardia palustris, L. New Forest. So. Hants, June, 1882.—G. C. Druce.

Callitriche vernalis. River Wye, Millersdale, Derbyshire, June, 1882.—W. H. Painter. Is *C. stagnalis*.—J. T. Boswell.

Sedum Forsterianum, Sm., var. *virescens*. Occupying damp shady cliffs on both sides of the Rhaidr Falls bounding the counties Montgomery and Denbigh, 4 miles west of Llan-rhaidr, July, 1882. Quite green; larger in all its parts than the glaucous form of *S. Forsterianum*. This is the same plant as I have in other years sent to the Club from a precisely similar situation at Water-break-its-neck, Radnorshire; but I am in entire doubt whether it should be referred to this species or to *S. rupestre*, Huds. It does not agree in size with the description of Mr. Borrer's specimens of the var. *virescens* of *S. Forsterianum* in Eng. Bot.; which are stated there to be "more slender than the var. *glaucescens*."—Augustin Ley. "I think there are two sub-species of *rupestre*, viz.:—1. *S. pruinatum*, Brotero = *S. elegans*, Lejeune. 2. *S. Forsterianum*, Sm. = *S. aureum*, Wirtg., and that this represents the latter excellently."—J. G. Baker. "I think rightly named by Mr. Ley, though more robust than the true *Forsterianum*."—J. T. Boswell.

Saxifraga pedatifida, Sm. Achill I., Ireland, 1853. A. W. Bennett (Coll. W. Andrews). For opinions as to the nativity of this plant, see J. of Botany, 1883, pp. 158, 181.

Professor Bennett also sends the following, collected by the late Mr. W. Andrews, who gave them to Prof. Bennett's father:—

S. Andrewsii, Harv. Glen Caragh, Kerry, 1853.

S. Hirculus, L. Co. Meath, 1854.

S. Geum, L. var. *glandulosa*. Great Blacket Island, Kerry, June, 1854.

S. Geum, L. var. *typica*. Kerry, 1849.

Helosciadium nodiflorum, var. *repens*, Eng. Bot. Duddingston

Loch, Edinburgh, August, 1882.—Charles Bailey. I should call this *H. nodiflorum, genuinum.* It is the same form as *H. nodiflorum* var. Worlaby, North Lincoln, 1882.—G. Webster.

Œnanthe silaifolia, Bieb. Meadows, Lugg Mills, Herefordshire, 13th June, 1882.—A. Ley.

Selinum Carvifolia, L. Near Brigg, No. Lincolnshire, 14th Sept., 1882. See Proceedings of the Manchester Literary and Philosophical Society, 1882-3, p. 44.—F. A. Lees. (Coll. : Charles Bailey). Fordham, Cambs, August, 1882.—A. Bennett. (Coll. : W. Cross.)

Carduus pycnocephalus, Jacq. Slope under the Hoe, S. Devon, 2nd June, 1882. T. R. Archer Briggs. See Flo., Plymouth, pp. 191, 192.

C. nutanti-crispus. St. Weonard's, Herefordshire, 10th Oct., 1882.—A. Ley. This I call *acanthoides.*—C. C. Babington. I would name accordingly (i.e., *nutanti-crispus*), also the plant from "Cumnor, Berks, August, 1884. G. C. Druce."—J. T. Boswell.

C. crispus, var. *polyanthemos.* St. Weonard's, Herefordshire, 2nd September, 1882.—A. Ley. Is probably right, but has the leaves more tomentose than usual, consequently it approaches the normal form of *C. crispus.* J. T. Boswell.

C. crispus, var. *litigiosus.* St. Weonard's, Herefordshire, 10th Oct., 1882.—A. Ley. Seems to me the same as the previous plant, gathered later in the season when the peduncles have elongated.—J. T. Boswell.

Arctium intermedium, Lange. Banks of the Wye, Little Doward, Herefordshire, Sept., 1882.—A. Ley. (Coll. B. M. Watkins.) I think correct; but why cannot collectors gather perfect specimens, especially of difficult plants like these? A root-leaf is wanted.—C. C. Babington. Seems to me *eu-minus*, but it is a side shoot, and consequently difficult to pronounce upon.—J. T. Boswell.

Gnaphalium luteo-album, L. Wells, Holkham, W. Norfolk, 18th Sept., 1882. On a wild piece of ground near the sea, away from cultivated ground; if not native, at least well-established.—E. F. Linton.

Senecio spathulifolius, D.C. Near Holyhead, Anglesea, June, 1882.—J. E. Griffith.

Chrysocoma Linosyris, L. Berry Head, Devon, June, 1856.—A. W. Bennett. (Coll. E. T. Bennett.)

Petasites vulgaris, Desf., var. *hybrida.* Claverdon, Warwick, May, 1882.—R. L. Baker. *Tussilago hybrida*, L. Sp. P. 1214. "Eng. Bot. ed. 1, vol. 6, t. 430. Smith, Eng. Fl. var. b. Hooker and Arnott's Brit. Fl. ed. 8, p. 249, var. b. florets nearly all fertile *Tussilago hybrida*, L." In other words it is really a fertile form of *P. vulgaris*, though supposed by Linnæus to be a separate species. It seems much rarer than the ordinary plant, but more plentiful in the Midland and Northern Counties than in the South. Mr. G. Nicholson told me that it grows in several places in Yorkshire.—Arthur Bennett.

* *P. albus*, Gært. Near Warwick, April, 1881.—E. Lomax.

Leontodon autumnalis, var. *pratensis.* Clova, Forfar, July, 1882.—J. E. Sunderland.

Picris hieracioides, var. *arvalis.* Low cliffs, near Southwick, W.

Sussex, Sept., 1882.—A. Bennett. Differs from Jordan's *arvalis* in having the heads much less umbellate.—J. T. Boswell.

Taraxacum palustre, or *udum?* Sphagnum swamps, Devil's Punch-bowl, Surrey, 13th May, 1882.—W. H. Beeby. I should call this *palustre* certainly. *T. udum*, of Jordan, as I understand it, is a much larger plant, with distinctly runcinate leaves and with a few of the outermost phyllaries reflexed, but I have seen heads from the same root with the phyllaries all applied, and some of them with the phyllaries reflexed.—J. T. Boswell. I considered the above to be *palustre*, and different from the plant referred to by Watson to *T. udum*, Jord., which latter occurs in various parts of Surrey.—W. H. B.

* *Crepis nicæensis*, Balb. Pasture recently laid down near Pontrilas, Herefordshire, 21st June, 1882.—A. Ley.

Hieracium anglicum, Fr., var. *decipiens*, Syme. Basaltic rocks, Cave Hill, Belfast, 5th July, 1882.—S. A. Stewart.

H. anglicum, Fr. Strome Ferry, W. Ross, July, 1881.—G. C. Druce. Probably correct.—J. G. Baker.

H. cæsium, Fr. Great Doward Hill, Herefordshire, 2nd June, 1882. Name on the authority of Mr. J. G. Baker. It grows intermixed with *H. murorum*, and under the same conditions of light and temperature, and differs from this species conspicuously (1) by the reddish green leaves, especially the under side of the root leaves; (2) by the phyllaries more swollen, and of a much greyer green; (3) by the straight peduncles; and (4) by the slightly earlier period of flowering.—Augustin Ley.

H. cæsium, var. *cambricum*. See "J. of Bot.," vol. VIII., p. 362 J. E. Griffith.

H. tridendatum? Harrogate, Yorks., 4th August, 1882.—E. F. Linton. This seems to me quite typical *tridentatum*.—J. G. Baker.

H. corymbosum, Fries. Killin, Mid-Perth, August, 1882. I send up some more specimens of a *Hieracium* from Killin, of which, according to the Exch. Club Report for 1879, Dr. Boswell would not certainly pronounce whether it was *H. strictum* or *H. corymbosum*, though he inclined to the latter name. I hope with fresh specimens it may be more easy to decide which of the two forms it shall be called. It was fairly abundant this last summer, always growing down in the valley, and usually not far from one of the two streams which feed Loch Tay.—E. F. Linton. I cannot draw any clear line between *crocatum* and *corymbosum*.—J. G. Baker. This plant is referred to *H. corymbosum* by Mr. Backhouse. I still think this is *H. corymbosum*. The Rev. E. Linton was good enough to send me fresh specimens in 1882, but I was unfortunately from home at the time, and, on my return, they were too much withered to be recognisable; and still more unfortunately, though I planted the roots, they did not grow. In no genus is cultivation more important than in *Hieracia*. Many species which closely resemble each other in the wild state become widely different when cultivated. *H. anglicum* and *H. iricum* are examples of this.—J. T. Boswell.

H. corymbosum, Fr. Cliffs between St. Andrews and Kinkell Ness, N. E. Fife, 8th August, 1882.—Charles Bailey. "I think that your *Hieracium* from the neighbourhood of St. Andrews is *H. corymbosum*, Fries., though it differs a good deal from

the type. The leaves are not so rhomboidal in yours, nor is the corymbous character 'typical.' The peduncles are larger than usual, and the heads not nearly so much condensed. Still I think it is an 'erratic form' of that species. * * * It is difficult to say, without very close observation, what change may be effected (in this changeable genus!) by locality and soil. Some broad-leaved forms of *H. crocatum* run so near to *H. corymbosum* at first sight that it is difficult to speak positively about a single specimen. From the long and scattered peduncles, and somewhat differing leaves in your plant, I can quite imagine that it *may* be a very luxuriant 'broad-leaved form' of *H. crocatum;* and yet I think that 'till further evidence' presents itself, it may be most prudently called '*corymbosum.*' Yet I fully agree with Prof. Babington's feeling of uncertainty." J. Backhouse in litt. ad. Charles Bailey.

Hieracium? Arlington, N. Devon, 21st Sept., 1882; Clovelly, N. Devon, 15th Sept., 1882, "*umbellatum* var."—J. G. Baker. Speaking of the latter plant, Mr. Archer Briggs says: "Certainly *umbellatum.*" "Both, I think, broad-leaved forms of *umbellatum*, but quite unlike anything I possess.—J. T. Boswell.

Arctostaphylos alpina, Spreng. Hoy Hill, Orkney, 21st Sept., 1882.—W. I. FORTESCUE.

Erythræa? Aberdovey, N. Wales, August, 1879.—H. E. Fox. This is *E. pulchella*, Fr., "no doubt."—J. G. Baker.

Solanum ochroleucum. Hort. cult., 1882. Seed from Mortlake, Surrey, 1875. "After six years' cultivation this still comes true from seed."—J. GROVES. I believe this to be identical with a plant collected by me at Mortlake in 1878. Specimens were sent to the Club, and Mr. J. G. Baker named them *S. luteo-virescens*, Gmel.—George Nicholson.

Veronica humifusa, Dicks. Glen Clova, Forfar, July 1882.—J. E. SUNDERLAND.

Euphrasia gracilis. Balsall Common, Warwick, Sept., 1882.—H. BROMWICH.

Orobanche amethystea, Thuill. On *Daucus Carota*, Undercliff, near Dover, E. Kent, June, 1882.—A. BENNETT.

Mentha gentilis, L. var. *Wirtgeniana.* River bank, near Hereford, 31st August, 1882.—A. LEY.

M. arvensis, L. Harrogate, Yorks, 4th August, 1882. Sent to show that former stunted specimens from same place were no variety.—E. F. LINTON.

M. arvensis, var. *præcox.* Mr. J. E. Bagnall remarks: "Does not agree with description; merely ditch-side form of *arvensis* slightly modified by the habitat." Mr. Baker made no comment.

Myosotis collina var. *Mittenii.* Grassy bank, Salhouse, E. Norfolk, 9th March, 1882.—E. F. LINTON.

Trientalis europæa, var. *nana.* Loch-na-gar, South Aberdeen, July, 1879. A dwarf form with large flowers and small leaves.—G. C. DRUCE. I do not see any reason for calling this a variety.—J. T. Boswell.

Plantago Timbali, Jord. Clover field, St. Weonard's, Herefordshire, 26th August, 1882.—A. LEY.

Salicornia radicans, Sm. Muddy salt marsh, Southwick, W. Sussex, September, 1882.—A. BENNETT.

Rumex rupestris, Le Gall. Braunton Burrows, N. Devon, 14th Sept., 1882.—A. Ley.

R. nemorosus, var. *trigranulatus*. Mud flats, near Beaulieu, Hants, 10th August, 1882.—A. Ley. Perhaps rightly named, but I suspect a hybrid between *conglomeratus* and *nemorosus*.—J. T. Boswell.

R. crispus, L. var. *elongatus*. Tidal banks of the Itchen, near Southampton, 11th August, 1882. Plentiful for a few hundred yards of the tidal river bank; but I did not notice it elsewhere, though botanising carefully down the river. It had all the characteristics of the plant as it occurs at Tinterne, Monmouthshire, though less fine and well grown.—Augustin Ley. In reply to my naming this plant *Hydrolapathum*, Mr. J. G. Baker replies: "Evidently *Hydrolapathum*, not *crispus*." "*R. Hydrolapathum*; certainly nothing to do with *elongatus* or any form of *crispus*."—J. T. Boswell.

Asarum europæum, L. Deerfold Forest, Wigmore, Herefordshire, 20th April, 1882.—T Butler.

Salix hippophäefolia, Thuil. River side, near Ross, Herefordshire, 1st April and 26th June, 1882. I send specimens of a *Salix* under this name on the authority of Mr. Leefe, who, I believe, was inclined to consider it this species. Its bisexual catkins are remarkable. It was pointed out to me by the Rev. W. H. Purchas.—Augustin Ley. Cuttings of this interesting willow were supplied to me last year by the kindness of the Rev. W. H. Purchas, and also of Mr. Ley himself. I think this may be a form of *S. hippophäefolia*, which has long been suspected to grow near Ross. The form is curiously (and, I am told, constantly) bisexual; but whether diandrous, as Koch says, distinguishing it thus from the triandrous *S. undulata*, Ehrh., the single specimen, and my impaired eyesight, do not enable me to determine. The male of what I take to be the *S. hippophäefolia* was found by Dr. Fraser near Wolverhampton, and a male plant named *S. fusca* was sent to me from Woburn a good many years ago, which I take to be *hippophäefolia*.—J. E. Leefe. Right, I believe.—J. T. Boswell.

S. viminalis, L., var. *intricata*. River side near Ross, Herefordshire, 1st April and 26th June, 1882.—A. Ley. In the var. *intricata* the style is very short, and the stigmas from the first cloven, reflexed and entangled. The leaves also are broader in *intricata* than is usual in *S. viminalis*.—J. E. Leefe.

S. cinerea, L., var. *oleifolia?* The plant I send under this name from Dorstone, Herefordshire, clearly belonged to the *cinerea* group by the short styles, the remains of which I was able to observe when picking it.—Augustin Ley.

S. oleifolia. Pit near Hatton, Warwickshire, April and September, 1882.—H. Bromwich. Catkins much like those of *S. oleifolia* published in "S. Brit." exsic., No. 44 which was said by Mr. Borrer to be exactly Smith's *oleifolia*; but the Warwickshire specimens have no stipules, and though the leaves are tapering towards the base, which is characteristic of *oleifolia*, they are less broad above the middle, *i.e.*, less obovate than usual.—J. E. Leefe.

S. Caprea, L. var. *sphacelata*. (?) Wood, Westhope Hill, Herefordshire, 29th May, 1882.—A. Ley. A small variety, I think, of *S. Caprea*.—J. E. Leefe.

Salix repens. Ranworth, Norfolk, E. The marshes of this interesting Broad abound in lowland Salices. I send some forms of *S. repens.* The capsule in every case is silky, more or less; therefore (according to Hooker) none are *repens* proper. No. 1, with leaves appearing after the flowers, faintly serrate, tip fairly straight, comes near *S. prostrata;* but the stem was rather decumbent or ascending. The leaves of No. 2 also appear after the flowers, but they are rather long and narrow, and have the tip curved. No. 3, having leaves appearing with the flowers, slightly serrate, tip generally re-curved, stem decumbent, I have ventured to call *S. ascendens*, Sm. No. 4 is like the last, but having a more prostrate growth, may be *S. parvifolia*, Sm. I believe *S. fusca*, L., was growing in the same marsh, but I have no specimens to send. On a dry heath within a few miles *S. argentea*, Sm., was in fair quantity.—E. F. Linton. On the above forms the Rev. J. E. Leefe writes :—"No. 1. I should call *S. repens*, L., Koch. No. 2. Not unlike, as to leaves, to Salict. Brit., No. 88, named *ascendens* by Mr. Ward. I should myself be content to call it *S. repens*, L. (non Smith), as I think the different forms are best arranged under one species, as Mr. Borrer consented to do. See Hook., Brit. Fl., Ed. 4, p. 361. No. 3. *S. repens*, L. var. As a segregate it seems most like *S. argentea*, Sm. No. 4. The only *parvifolia* known to me is the male, the plant of Eng. Botany, and of Forbes, which is remarkably devoid of the silky pubescence on the underside of the leaf characteristic of the tribe. Mr. Linton's plant agrees in its narrow elliptical leaves. Smith's plant is said to have a very strong fishy smell when shut up in a small box—hence the name *fœtida*, of which *parvifolia* is a variety."

Lemna minor, Linn. Tankerness, Orkney, March, 1882; collected by W. Cowan. The only known station. Reported as occurring in "ditches," by Dr. Gilbert Maccrab, certainly a mistake; and marked "extremely doubtful" by Robert Heddle and Dr. Duguid in their MS. list. Possibly introduced.—W. Irvine Fortescue.

Potamogeton lanceolatus, Smith! "Cultivated from specimens gathered in Burwell Fen, Cambridgeshire, 1880, A. Bennett." I send specimens for all the members. The question of the distribution of *P. lanceolatus*, as a species, may now be considered fairly settled, in all essential characters (especially in the fruit), it differs from all known species. Confined (at present) to the British Isles, I believe we have here a strictly endemic species; and I venture to think that few, if any, endemic species have been subjected to so crucial a test as this. Enquiries in all quarters of the world, accompanied by specimens, have failed to elicit any answers contradictory to the above assertion. The only specimens that approach it, even in appearance, are those named "*lanceolatus*, Sm.," by Nolte, from Holstein and Laneuberg; these by the kindness of Herr R. von Uechtritz, of Breslau, I have been enabled to examine at my leisure, and I refer them to *heteroplyllus.* Since my paper in the "Journal of Botany" (1881, p. 65–67) I have received specimens named as Smith's plant from Prof. Lange, of Copenhagen (Denmark), and M. C. J. de Maximowicz, of St. Petersburg (Lithuania-Gorski), and I do not hesitate to refer them to *P. rufescens*, Schrad. Its distribution in Britain is certainly peculiar, but it may have been

that it did grow in other localities of the Great Fen Level before their drainage, but I can find no trace of this among old specimens of the genus. Its rare fruiting would partly explain its not being distributed by aquatic birds, but why should not *P. trichoides*, Cham., be so distributed?—this fruits freely some years. That *trichoides* did occur formerly in other parts of Norfolk, where it is now unknown, is certain, as Mr. Carruthers has shown me fossil specimens that unquestionably belong to it. I have not succeeded in detecting any seeds of the genus in the stomachs of migratory aquatic birds, but my opportunities have been very few, and those accorded me by the kindness of the late Mr. J. Flower, F.Z.S.—ARTHUR BENNETT.

Potamogeton nitens, var. *latifolius*, Tis! non Fieber. Lunan Burn, E. Perth, 18th August, 1882.—A. BENNETT. (Coll. A. Sturrock.)

P. decipiens. Canal, Warwick, Sept., 1882.—R. L. BAKER. And var. *affinis*, Teviot, Roxburgh, 31st August, 1882.—A. BROTHERSTON. Dr. Baker's plant approaches my var. *affinis* very closely, the only difference being the spikes are longer than in Mr. Brotherston's Tweed plant. Since the note on this plant ("J. of Botany," 1882, p. 184), I have received by the kindness of Herr R. von Uechtritz, a good series of the Silesian plant, and I cannot consider it represents Mr. Brotherston's specimens so closely as Rev. T. Morong supposed. A. Bennett.

P. Zizii. Rescobie Loch, Forfar, August, 1882.—G. C. DRUCE.

P. Zizii, var. *elongatus*, M. & K. Fol., Derwentwater, Cumberland, 15th Sept., 1882. Fruct., Coniston Lake, N. Lancashire, 22nd Sept., 1882. See Proceedings of the Manchester Literary and Philosophical Society, 1882-3, p. 40.—CHARLES BAILEY.

P. lucens, v. *acuminatus*. Canal, Warwick, August, 1882.—R. L. BAKER. Almost typical *lucens*, not *acuminatus*, Schum.—A. Bennett. On the Rev. A. Ley's plant, sent as the above var., Mr. A. Bennett remarks: "Although the midrib is strongly excurrent, it is not, as I understand it, *acuminatus*, Schum., which has much narrower leaves, tapering gradually to each end. I have only seen this in Norfolk."

P. prælongus, Wulf. White Mere, Ellesmere, Salop, October, 1882.—A. BENNETT. (Coll. W. E. Beckwith.)

P. crispus, Linn. Loch of Aikerness, Evie, Orkney, 22nd July, 1882. A new station. Reported from Rousay by Mr. Robert Heddle some 30 years ago. As yet not known to occur elsewhere in Orkney.—W. IRVINE FORTESCUE.

P. zosterifolius, Schum. Canal, Abingdon, Berks, June, 1882. G. C. DRUCE.

P. pusillus, var. *Sturrockii*. Marlee Loch, E. Perth, 11th Sept; 1882.—A. BENNETT. (Coll. A. Sturrock.) See J. of Bot., 1883, p. 279.

P. flabellatus, Bab. Isis, Oxford, June, 1882.—G. C. DRUCE. R. Wey, Guildford, Surrey, Sept., 1882.—W. H. BEEBY.

Alisma natans, L. Canal, Whixall Moss, Salop, 25th July, 1882. A. LEY.

Orchis purpurea, Huds. Cuxton, Kent, 4th June, 1882.—H. E. FOX.

O. militaris, L., Hort. Reigate, 1882. Root from Loudwater, Bucks.—W. H. BEEBY.

O. incarnata, L. Southport, Lancashire, 8th June, 1882.—GEO. NICHOLSON.

Habenaria viridis, Br. Pasture, Aviemore, E. Inverness, 4th August, 1882.—J. GROVES.

Glaiolus illyricus, Koch. New Forest, S. Hants, June, 1882.—G. C. DRUCE.

Iris Pseud-acorus, L. Kelvedon, Essex, 20th June, 1882.—E. G. VARENNE. Mr. Nicholson has mislaid the specimen sent him; I think it *Bastardi*, which I have not seen before.

Leucojum vernum, L. Dorsetshire, Feb., 1877.—E. A. LOMAX. In reply to inquiries Mrs. Lomax writes that she is not at liberty to divulge the exact station for this plant, but that it grows on a piece of exposed common, on the slope of a bank, and above and below it, by the side of a ditch, in fair quantity, but not covering a large area. Undoubtedly established, however introduced, which seems to have been before the time of the oldest inhabitant.

Paris quadrifolia, L. Ripe fruit. Corlie Glen, Kingcausie, Kincardineshire, Sept., 1882.—J. T. BOSWELL.

Lilium Martagon, L. Headley Lane, Surrey, July, 1855.—A. W. BENNETT.

Tulipa sylvestris, L. Addiscombe, Surrey, 30th April, 1882. This has occurred for many years with *Scilla nutans*, &c., in a garden formed on the site of an old rookery, where the tulip was doubtless originally planted.—W. H. BEEBY.

Juncus balticus, Willd. Wick, Caithness, 17th June, 1882.—W. H. PAINTER. (Coll. F. Grant.) Sands of Barry, Forfar, August, 1882.—G. C. DRUCE.

J. acutiflorus, var. *macrocephalus?* Hedge Court, Surrey, 5th Nov., 1882.—W. H. BEEBY. This is named var. *multiflorus*, Weihe, by Prof. Buchenau; a syn. for *macrocephalus*, according to Koch., Syn. II. "The plant I suppose to be var. *macrocephalus*."—J. T. Boswell.

J. acutiflorus, var *macrocephalus*. Hedge Court, Surrey, 5th Nov., 1882.—W. H. BEEBY. Named by Prof. Buchenau, "*J. lamprocarpus*, Ehrh., var. *macrocephalo* affinis," and "more likely a hybrid between *lamprocarpus* and *acutiflorus*." I have sent this year (1883) a large supply of this plant. It seems intermediate in some respects. I have now watched it through two seasons up to as late as November, and although ovules may be found in well-formed capsules at the end of summer, the capsules thenceforward shrivel up and no seeds whatever seem to be produced.—W. H. B.

J. acutiflorus, var. *nemorosus?* Hedge Court, Surrey, 5th Nov., 1882. Apparently the same as a plant so named in "Herb." the late Rev. H. Davies. It is a large lax-habited plant four feet high, probably the result of its growing in shade. Dr. Buchenau considers it merely "forma elatior."—W. H. BEEBY. "Seems to me a luxuriant form of *acutiflorus*."—J. T. Boswell.

Eriophorum gracile, Koch. New Forest, So. Hants, June, 1882. G. C. DRUCE. So rare a plant deserves a little more care than was bestowed on the poor specimens sent.

Carex incurva, Lightf. Sea shore, opposite Copinshay, Deerness, Orkney, 1st June, 1882. A new station, the only other in Orkney being Pierowall, Westray, reported by Dr. Duguid.—W. IRVINE FORTESCUE.

Carex pseudo-divulsa. Field, Old Park, Warwick, June, 1879.—H. Bromwich. Professor Babington writes : "What does Mr. Bromwich mean by *pseudo-divulsa ?* I call this *divulsa.*"

C. saxumbra, Lees. Glen Phee, Forfar, August, 1882.—G. C. Druce. "Certainly not Dr. Lees's plant. I should call it an immature specimen of ordinary *C. pilulifera.*"—J. T. Boswell.

C. præcox, Jacq. (?) (abnormal form). Hind Head, Surrey, 29th May, 1882. Betchworth Hill, Surrey, 27th May, 1883. Dr. Buchenau writes : "Altogether *præcox*," but afterwards suggests its being possibly a hybrid with *panicea.* Dr. B. was, of course, unaware that there was no *panicea* growing near the above plant, which is simply an abnormal form with the perigynium greatly inflated in the lower, and elongated in the upper part, thus resembling an acorn in shape.—W. H. Beeby. "Seems to me to be *præcox* with abnormal fruit, or seems to differ considerably on the same plant. Is it caused by a fungus, or an injury produced by an insect ?"—J. T. Boswell.

C. flava. (?) Glen Phee, Forfar, August, 1882.—G. C. Druce. "Is what I used to call *speirostachya*, Sm., and now *Hornschuchiana.*" —C. C. Babington.

* *Anthoxanthum Puellii*, Sec. and Lam. Among clover, St. Weonard's, Herefordshire.—A. Ley.

Agrostis nigra, With. Hartshill, Warwick.—J. E. Bagnall. Whitmarsh, Warwick.—R. L. Baker and H. Bromwich. Cornfields, St. Weonard's, Herefordshire.—A. Ley. Marycutter, Kincardineshire.—J. T. Boswell. I send a few specimens of this as illustrating Mr. Bagnall's paper in the "Bot. Journ.," 1882, p. 65. It is the common cornfield variety of this plant in this county ; it is an exceedingly troublesome weed on the light soils ; but is by no means confined to them.—Augustin Ley. A few examples of this are sent for distribution. I believe it will be found to be fairly abundant in arable land throughout the country, and that close examination will show it too distinct as a variety from typical *A. vulgaris.*—J. E. Bagnall. Dr. Boswell writes :—"I sent this to Mr. Bagnall, and he said it was the same plant as that figured in J. of Bot. I think it merely *A. vulgaris* growing in cultivated ground. The *A. nigra* was abundant in the field, and the ordinary form of the *A. vulgaris* plentiful along the edges where the soil had not been ploughed."

Calamagrostis Hookeri. Gravelly lake shore, Scawdy Island, Lough Neagh, 30th June, 1877.—S. A. Stewart.

Aira setacea, Huds. *A. uliginosa*, Weihe. Loch-an-Eilien, E. Inverness, 29th July, 1882.—J. Groves.

A. flexuosa, mountain form. Braeriach, E. Inverness, at about 4,oooft., 2nd August, 1882.—J. Groves. Professor Hæckel writes concerning this : "Is b, *montana*, Wahlenb. ; I should prefer to write b, *contracta*, Neilr. Fl. v. Nied-Oest., because the name *montana* was at first given by Linnæus to another plant, probably *A. botnica*, Wahlenb."—J. Groves.

Poa nemoralis, var. *glaucantha.* Root from Snowdon, North Wales. Hort., Croydon, 1882.—A. Bennett.

Poa Parnellii ? High Force, Teesdale, So. Durham, July, 1882. G. C. Druce. "True *Parnellii.*"—J. G. Baker.

Trichomanes radicans. Torc Mountain, Co. Kerry, July, 1853.—A. W. Bennett.

Asplenium germanicum. Near Dolgelly, July, 1879.—J. E. Gritfith.

Woodsia hyperborea. Snowdon, August, 1882. Very scarce.—T. Butler.

Aspidium aculeatum, Sm., b. *lobatum.* Kirkburn, Hoy, Orkney, 11st Sept., 1882. I observed some three or four plants on the south side of the burn. As this station appears to be well known, it is to be feared the fern may soon be exterminated there. Dr. H. H. Johnston found the only other known station in Orkney, but I think only saw three plants. Dr. A. R. Duguid found it some thirty years ago, scarce in The Green of Gaer, Hoy, but I was unable to find it there in 1882.—W. Irvine Fortescue. *P. lobatum* of E. B. III., *P. lobatum* var. *aculeatum*, the late Mr. Watson told me, he had never seen from Scotland."—J. T. Boswell.

Nephrodium dilatatum, var. *glandulosum?* Woods near Alvington, N. Devon, 20th Sept., 1882.—A. Ley. "True *dilatatum*, not Newman's *glandulosum.*"—J. G. Baker. Ordinary *dilatatum*, not approaching *glandulosum.*— J. T. Boswell.

Nitella tenuissima, Kütz. Burwell Fen, Cambs., August, 1882. A. Bennett. Cors Bodeilio. Anglesea, June, 1882.—A. Bennett. (Coll. J. E. Griffith.)

Chara hispida, L., var. *rudis.* Kippielaw Pond, Roxburgshire.—A. Brotherston. Passed by Messrs. Groves.

C. polyacantha, Br., R. & S. Moss, near Penrith, Cumberland, July, 1882.—R. Wood. (Coll. W. Hodgson.) Kippielaw Pond, Roxburgh, 5th July, 1882.—A. Brotherston. Both passed by Messrs. Groves.

C. aspera, Willd. Naturalised in the Aquarium at Glasnevin, Co. Dublin, June, 1882. Burwell Fen, Cambs., August, 1881.—A. Bennett. Studland, Dorset, August, 1881.—A. Bennett. (Coll H. T. Mennell.) Frensham Little Pond, Surrey, 10th Sept., 1881. H. Groves. All passed by Messrs. Groves.

C. aspera, var. *subinermis:* Borth, Cardiganshire, August, 1881. A. Bennett. (Coll. E. Straker.) Coron Lake, Anglesea, July, 1881.—J. E. Griffith. Loch of Harray, Orkney, 24th Oct., 1882. W. I. Fortescue. The first passed by Messrs. Groves, who add "var. *subinermis*" to the two latter.

C. fragilis, Desv., var. *barbatum* accedens. Scotson Moor, near Aberdeen, August, 1881.—A. Bennett. (Coll. Geo. Nicholson.) Although approaching var. *barbata* in the length of the bract cells, the stipulodes are not sufficiently long for that form. We have seen var. *barbata* from this locality. This plant, together with most of our mountain forms, would be included under the sub-species *delicatula* of Braun's "*Fragmente.*"—H. and J. Groves.

NEW COUNTY RECORDS AND CONFIRMATIONS.

Ranunculus parviflorus, L. Northamptonshire.—G. C. Druce. (Confirm.)

Fumaria muralis, Sond. Berks.—G. C. Druce.

Subularia aquatica, L. Westmoreland.—G. C. Druce. (Confirm.)

Viola lactea, Sm. Surrey.—W. H. Beeby. (Confirm.)

Stellaria umbrosa, Opitz. Surrey.—W. H. Beeby. (Confirm.)

Lathyrus pratensis, L. East Inverness.—J. Groves.

Taraxacum palustre. Surrey.—W. H. Beeby. (Removing query in "Top. Bot.," ed. 2.)

Rumex rupestris, Le Gall. North Devon.—A. Ley. (Confirm.)

Lemna minor, L. Orkney —W. I. Fortescue. (Confirm.)

Potamogeton prælongus, Wulf. Salop.—A. Bennett. (Confirm.)

P. crispus, L. Orkney.—W. I. Fortescue. (Confirm.)

Habenaria viridis, Br. E. Inverness.—J. Groves.

Aira setacea, Huds., *A. uliginosa*, Weihe. E. Inverness.—J. Groves.